

 **PetrozavodskMash**



**PETROZAVODSK PAPER MACHINERY
CORPORATED**

YOUR RELIABLE PARTNER

The Petrozavodsk Paper Machinery Corporation trading as Petrozavodskmash Corp. is one of the biggest in Russia and Europe machine building companies. It specialises in equipment for papermaking and chemical & petrochemical industries. The company was established in 1961. It is situated in Petrozavodsk (Republic of Karelia, Russia) on the shore of Lake Onego connected by a system of channels with the Baltic and the White Seas, making it possible to transport large-size machines and apparatus over water.

Back in 1961, the only shop available produced some few types of paper machine parts. Since then the company has become an advanced machine building complex the only one in Russia for the time being capable of delivering the complete equipment set for a pulp & paper mill on a turn-key basis, from a timber yard to paper/board machine.

For last 10 years Petrozavodskmash Corp. have managed not only to save but also to promote its unique production possibilities. It enables us to keep the competitive edge with western companies in equipping and upgrading pulp and paper mills in Russia and several foreign countries. We have kept in full volume our production facilities comprised of a foundry, welding, machine & assembly productions.

Switching to market economy we have managed not only to maintain our traditional product line but also to change over to new equipment for power stations, various chemical apparatus, pumps, railway tank car boilers, large-sized metalwork for port terminals, farm implements etc.

Chemical and petrochemical equipment as well as high-teck cast-iron castings of our make are also well known in Russia and abroad.

It is due to unique machine tools, up-to-date workshops, well-experienced workers and engineers, highly skilled designers and technologists, advanced marketing service and well developed corporative computer system, that the company can produce high performance up-to-date process equipment. There are Development and Technology Centres that ensure the designer and technological support of the production facilities.

During the past more than 40 years our customers have got thousands of equipment units: 68 modernized or newly built paper/board/dryer machines, 85 corrugated board production lines, 153 pulp grinders, 154 thickeners, 215 barking drums, 214 chippers, 1609 disc refiners, 125 chips screens, 52 complete cooking plants, 169 digesters, 111 chests of different types, 140 bleaching towers in stainless steel and titanium and many other types of equipment for pulp and paper industry. Besides, we have supplied 224 heat exchangers for pulp & paper and chemical industries, 110 column apparatus for petrochemical industry, let alone hundreds of vessels and tanks.

The company keeps licensing and certification of the product manufacture. At present Petrozavodskmash Corp. has about 50 different Russian and foreign certificates and licenses in force.

Of most significant and approved by independent organization audits, suffice it to highlight ASME Certificate authorizing the company to manufacture pressure vessels, TÜV Certificate giving the right to manufacture dryer cylinders to AD-Merkblatt WO/ TRD100 standard as well as inspecting to HP-0 regulations.

The quality management system at the factory meets ISO 9001: 2000, which is certified in 2004 by Det Norske Veritas agency.

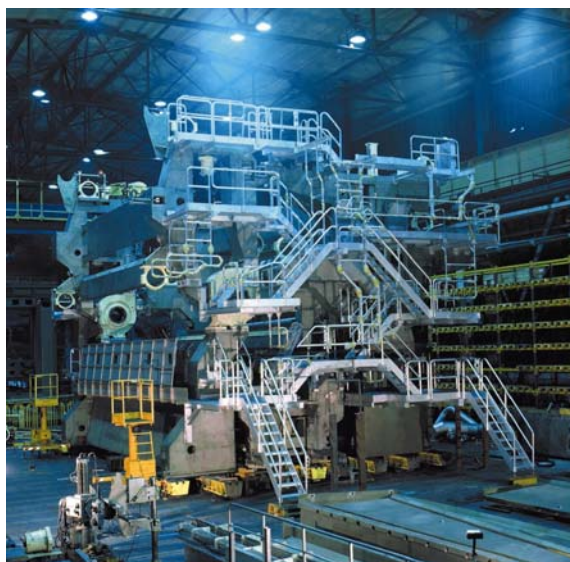


Petrozavodskmash Corp. successfully cooperates with leading western firms, carrying out joint equipment deliveries or fulfilling subcontractor orders. All this makes us able to fulfil needs of the most exacting customers, keeping acceptable price levels. Every year 35–40 % of equipment output is formed by export deliveries.

Our equipment runs almost at all pulp & paper mills in Russia and CIS countries as well as in Finland, England, Norway, Sweden, Poland, Germany, USA, China, Thailand, Malaysia, Hungary, Austria, Czechia, Algeria, Cyprus and others.

Of the current and future goals are upgrading of basic productions, implementation of new high-techs, forthcoming certification of the company in the field of ecological management on the basis of ISO 14001, and also several other productive, economic and social tasks to solve.

Our production program is open to you and can be modified to meet our mutual interests.



LIST OF EQUIPMENT OFFERED BY PETROZAVODSKMASH CORP.

1. PAPER MAKING EQUIPMENT

- 1.1 Paper machines producing writing-and-printing paper grades
- 1.2 Paper machines producing sack paper
- 1.3 Paper machines producing toilet paper and tissue
- 1.4 Board machines
- 1.5 Dryer machines
- 1.6 Component parts and separate units for paper and board machines as follows:
 - headboxes
 - wire parts for paper and board machines
 - hydraulic foils with wear-resistant inserts
 - wet suction boxes
 - press parts for paper, board and dryer machines
 - slotted suction felt washers
 - suction rolls
 - press rolls
 - drying parts for paper, board and dryer machines
 - cooling and drying cylinders
 - glazing cylinders
 - steam heads
 - machine calenders
 - calender rolls
 - peripheral reels
 - reel cylinders
 - reel-up drums
 - size presses
 - size-and-coater plants
 - open hoods
 - closed hoods
 - enclosures for drying parts of paper, board and dryer machines on the ground floor
 - wire blow-through chambers installations
 - heat recuperation plants
 - fast drying hoods
 - broke processing plants
 - drive devices
 - hydraulic drive stations
 - hydraulic drive for high-pressure shower
 - gears
 - tube rolls
 - swimming rolls
 - supercalenders
 - toothed couplings

- gates
- globe gates
- electric drive and automation for paper, board and dryer machines

2. CORRUGATED AND PASTE BOARD PRODUCING EQUIPMENT

- 2.1 Corrugated board production lines
- 2.2 Single-face board production lines
- 2.3 Paste board lines
- 2.4 Component parts and separate units for corrugated and paste board production lines as follows:

- reel-out stands
- preheaters
- single-facers
- corrugating rolls
- gluing machines
- drying tables
- rotational cutters
- creasing slitters
- cross cutters
- conveyer pilers
- broke removal plants
- electric drive and automation for corrugated and paste board lines
- glue preparation equipment

3. WOOD PROCESSING AND STOCK PREPARATION EQUIPMENT

- 3.1. Wood processing equipment:

- one and two-section barking drums
- chippers with output of 150-300 m³/h
- chippers with output of 20-40 m³/h
- disk cutting-tool chippers for dimension timber up to 1100mm in diameter
- waste wood chippers
- lump waste wood chippers
- rechippers
- chips screens
- complete lines and plants for process chips production
- wood conveying equipment
- conveying equipment for chain grinders loading

- 3.2. Stock preparation equipment:

- chain grinders
- disk refiners
- double disk refiners
- disk refiners with reinforced chamber

- disk refiners with screw feeder
- two-screw apparatus
- vibratory screens
- screens for fiber half-way products
- paper stock low-pulsation screens
- fiber half-way product screens
- plants for stock cleaning from heavy contaminants
- vortex cleaners
- two-drum thickeners
- two-drum washing presses
- pulp thickening and refining plants
- equipment for thermomechanical and chemi-thermomechanical stock production lines
- stock preparation process lines
- vertical hydraulic pulpers
- horizontal hydraulic pulpers
- screening hydraulic pulpers
- defiberizers
- thermodispersing plant for waste paper
- flotation plants
- process lines for recycled stock production
- chips steaming and refining plants for wood fiber board production

3.3. Electric drive and automation for wood and stock preparation equipment

4. PULP PRODUCTION EQUIPMENT

4.1. Pulp cooking equipment:

- batch cooking plants for craft process
- digesters for craft pulp batch cooking plants
- batch cooking plants for sulphite process
- digesters for sulphite pulp batch cooking plants
- heat exchangers for batch cooking plants
- washing-out chests
- accumulating tanks
- continuous cooking plants with vertical digester
- chips proportioners
- high- and low-pressure feeders
- steaming tanks
- impregnating apparatus
- heat exchangers for continuous cooking plants in kraft process
- cyclones for continuous cooking plants with vertical digester
- chips cleaning devices
- rodded sieves
- multi-tube continuous cooking plants
- cooking tubes for multi-tube continuous cooking plant
- screw feeder for multi-tube continuous cooking plants

- blow-out reservoirs
- pressure diffusers

4.2. Stock chests. vessels:

- high-consistency stock chests
- vertical screw chests
- chests with horizontal agitating device
- agitating device for stock chests

4.3. **Equipment for half-way products bleaching:**

- bleaching towers
- rotor type mixer-dispersers
- one- and two-roll mixers for mixing stock with chemicals
- oxygen-alkali bleaching reactors

4.4. **Equipment for liquor preparation and recovery:**

- vacuum evaporating plants for kraft liquors
- evaporators for kraft liquors plants
- vacuum evaporating plants for sulphite liquors
- evaporators for sulphite liquors plants
- steam-ejector pumps for evaporating plants
- concentrators installations for additional evaporation of liquors
- concentrators
- super-concentrators installations for additional evaporation of liquors
- super-concentrator evaporating apparatus
- steam generator apparatus
- heat exchange equipment for vacuum evaporating plants
- plants for storage, metering and mixing sodium sulphate with black liquor and ash.
- black liquor heaters
- cake dissolvers
- plants (complete) for continuous causticizing of liquors
- clarifiers
- filtering clarifiers for liquors
- slaker-classifiers
- causticizers
- recovery reservoirs

5. EQUIPMENT FOR CHEMICAL AND PETROCHEMICAL INDUSTRIES

5.1. Column apparatus:

- fractionating towers
- packed towers
- beer distillation columns
- column apparatus for condensate cleaning

- apparatus for hydrogen dioxide production

5.2. Heat exchange apparatus:

- shell-and-tube heat exchangers (TH, TЛ, ТП types)
- drying apparatus and rotating kilns

5.3. Vessels

- non-pressure (poured) vessels with 50 – 4000 m³ capacity
- pressure (up to 16 Mpa) vessels
- vessels of stainless steel, titanium, aluminium

6. POWER EQUIPMENT

- 6.1 Steam boilers with steam rate of 0,5; 1,0; 1,6; 2,5; 4,0 t/h, pressure of up to 1.4 MPa,
- 6.2 Hot-water shell boilers with rating of 0,1; 0,2; 0,315; 0,6; 1,0; 1,6; 2,0; 3,6 MW, fired with liquid fuel
- 6.3 Hot-water boilers with rating of 0,5; 1,0 MW, fired with wood wastes (chips, saw dust, peat, bark)
- 6.4 Hot-water boilers with rating of 0,1; 0,2; 0,5; 1,0 MW, fired with firewood
- 6.5 Modular boiler-houses and equipment sets based upon the aforesaid steam boilers
- 6.6 Modular boiler-houses and equipment sets based upon the aforesaid hot-water shell boilers fired with liquid fuel, wood wastes and firewood
- 6.7 Auxiliary equipment: mechanized store-houses for fuel chips, chips conveyors, bins, deaerators, flue gases cleaning systems, samplers, ash wet-removal systems

7. OTHER EQUIPMENT

- 7.1 Boilers and tank cars for oil transporting
- 7.2 Roller dryers for food products
- 7.3 Elliptical and spherical bottoms up to 4500 mm in diameter
- 7.4 Pipes and pipelines elements

For more information, please, contact us

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